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## WHAT IS CLAIMED IS:

## 1. A gliding or rolling board comprising:

a length measured along a longitudinal direction between a first end and a second end;

a width measured between a first edge and a second edge; a height measured between a lower or gliding surface and an upper surface;

height-wise, the board includes a first reinforcement, a second reinforcement, and at least one core located between the first reinforcement and the second reinforcement;

length-wise, the board includes a first end zone, a first intermediary zone, a first receiving zone, a central zone, a second receiving zone, a second intermediary zone, and a second end zone;

the core having a matrix comprising a filler material, the matrix having at least one cavity, at least one insert housed in the cavity of the matrix in a predetermined zone of the board, the insert having at least one mechanical property greater than that of the matrix, said property being at least one of tensile strength, compressive strength, bending strength, elastic limit, or other mechanical property, so as to locally improve mechanical properties of the board.

## 2. A board according to claim 1, wherein:

each said insert has an elongated shape and being oriented substantially along the longitudinal direction of the board.

## 3. A board according to claim 1, wherein:

said at least one insert comprises an insert located substantially half-way between the first and second lateral edges.

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4. A board according to claim 1, wherein:

said at least one insert comprises an insert extending continuously from the first receiving zone to the second receiving zone.

5. A board according to claim 1, wherein:

a through cavity is arranged in the matrix to receive said insert of said at least one insert, said insert connecting together said first reinforcement and said second reinforcement.

6. A board according to claim 1, wherein:

in a plane substantially parallel to the lower surface or to the upper surface, an insert of said at least one insert has a rectangular cross-section; and

in a transverse plane substantially perpendicular to the lower surface or to the upper surface, said insert has a rectangular cross-section.

7. A board according to claim 1, wherein:

in a longitudinal plane substantially perpendicular to the lower surface or to the upper surface, an insert of said at least one insert has a corrugated surface.

- 8. A board according to claim 1, wherein:
  an insert of said at least one insert has a parallelepipedic shape.
- 9. A board according to claim 1, wherein:

an insert of said at least one insert is housed in a non-traversing cavity of the matrix.

10. A board according to claim 1, wherein:

said at least one insert comprises at least a first lateral insert and a second lateral insert.

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11. A board according to claim 1, wherein:

each insert of said at least one insert extends continuously from the first intermediary zone to the second intermediary zone, a first and second non-traversing cavities being housed in the matrix to receive the inserts, respectively.

12. A board according to claim 1, wherein:

each insert of said at least one insert has a substantially constant thickness;

and

each insert of said at least one insert has relatively narrow ends and a center wider than a width of said narrow ends.

- 13. A board according to claim 1, wherein: at least one groove is provided in the matrix.
- 14. A board according to claim 1, wherein: the matrix is made from a plastic foam; and the insert is made from wood.
- 15. A process for manufacturing a gliding or rolling board, the process comprises: manufacturing a core;

assembling constituent parts of the board;

said manufacturing of a core comprises arranging at least one insert in a mold shaped like the core, then making a matrix by injecting plastic foam into the mold, the foam extending around the insert to form the core therewith.